

□if a English version is needed, please let me know□

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☐☐ ☐☐☐ email: gulifan@hotmail.com

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# ##### Turing Test #####

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Nature

[illegible]

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word-embedding vector space  
knowledge graph

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Technological Singularity AlphaGo Zero superhuman Quantum Supremacy

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量子コンピューティングの未来を展望する

量子コンピューティングの未来を展望する BRAIN Initiative 量子コンピューティングの未来を展望する

量子コンピューティングの未来を展望する

## AlphaGo Zero Superhuman Quantum Supremacy

Nature 量子コンピューティングの未来を展望する

AlphaGo Zero Nature superhuman [1] AlphaGo game AlphaGo Zero

game Nature Quantum Supremacy [2]

Shor's algorithm Quantum Supremacy

qubit NISQ noisy intermediate-scale quantum

Quantum Supremacy Sycamore NISQ noise

Sycamore AlphaGo Zero

Quantum Supremacy noise

Sycamore Sycamore 200 10000

Quantum Supremacy NISQ John Preskill [3]

Quantum Supremacy Quantum Supremacy Nature

Quantum Supremacy optimization machine learning NISQ noisy Sycamore

noisy

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Quantum Supremacy

# Nature > Superhuman > Quantum Supremacy

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##### tensor #####
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# AlphaGo Zero – Superhuman – Quantum Supremacy – “AI” – “Quantum” – “AI”

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Académie française

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[1] Mastering the game of Go without human knowledge, Silver D., Schrittwieser J., Simonyan K. et al, published in Nature, on 18 October 2017:  
<https://www.nature.com/articles/nature24270>.

[2] Quantum supremacy using a programmable superconducting processor, Arute F. et al, published in Nature, on 23 October, 2019:  
<https://www.nature.com/articles/s41586-019-1666-5>

[3] <https://www.quantamagazine.org/john-preskill-explains-quantum-supremacy-20191002/>.

[4] Dialogo sopra i due massimi sistemi del mondo (Dialogue Concerning the Two Chief World Systems), Galileo Galilei, published in 1632.